

The Effect of the Presence of Audit Committees on Earnings Management in Morocco

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Abstract

Our paper will try emphasizing the effect of the presence of audit committees on earnings management within the Moroccan context, and most specifically in the companies listed in the Casablanca stock exchange.

We have adopted previous research embedded in the Dechow, Sloan and Sweeny (1995) model of earnings management that requires a maximum of 6 companies by sector, a condition that limited our sample to 27 companies dispatched only on 4 industry sectors.

Given that the companies manipulate the accruals to show the increasing results or to maintain the stock price, the role of the audit committee is to ensure that this manipulation is to be reduced in order to provide investors with accurate information. In the Moroccan context, this reduction started appearing in 2014. The years 2011, 2012 and 2013 were marked by a preparation of implementation tools of these committees mainly the integration of independent administrators within the administrative boards.

However, due to lack of data, this study might be limited given the fact that the year 2016, which represented a year where the listed companies should have created an audit committee, was not covered by our study.

Keywords: Audit Committee, Earning Management, Accruals, Accounting

Introduction

Due to the increasing number of financial scandals in recent years, the creation of governance committees within the Moroccan companies became a necessity in order to enhance their competitively and allow them an access to different financial and international arenas.

Given that these companies are family owned, the implementation of governance committees mainly audit committees was a response to

specificities of good governance in international arenas or a requirement for multinational companies with regards to their subsidiaries. In Morocco, the first code was elaborated in 2008, 13 years after the first report of Vienot 1 (1995) in France.

In addition, to reduce the agency conflicts and financial information asymmetry, the audit committee should exert a supervisory power over the elaboration process of financial information. Beasley and Salterio (2001) consider that the creation of audit committees is a complementary control mechanism of the administration board.

In this sense, a number of studies are interested in tackling the relation between earnings management, information asymmetry and the audit committee. Schipper (1989) demonstrates that the leaders' managerial discretion allows them to conceive accounting information in a legal framework but with discretionary components, called earnings management. In addition to this, Trueman and Titman (1998) find that the relation between quality of accounting result published and information asymmetry as demonstrated by Felo, Krishnamurthy and Solieri (2003). These authors show that the presence of the audit committee improves the quality of financial information published. In other words, the presence of audit committees reduces the agency conflicts and asymmetric information.

Considering this situation, it was found necessary to study the interactions between the presence of audit committees, the elaboration process and the financial information mainly the contribution of the audit committees' presence in the reduction of earnings management.

To achieve this, before starting the literature review, we recall the role and the context of the creation of audit committees in Morocco in comparison to other international countries.

After that, we will present the research model and the methodology adopted in the work conducted. And finally, we will discuss the empirical results of our model and we will compare it with the results obtained previously by other international researchers.

Context and role of the audit committee

The Moroccan context of audit committees

Audit committees in Morocco were created principally due to the fact that a large number of companies were dependent on international groups and their internationalization.

In Fact, the first report related to companies' governance was written in Mars 2008 by the National Commission on Corporate Governance constituted by the Ministry of Economic and General Affairs and the General Confederation of Moroccan Enterprises (CGEM). This report recommends for the first time, the creation of at least two governance committees, an

audit committee and a compensation committee in order to reinforce the governance of Moroccan companies and be able to fight globalization and allow for a better search for other financial resources within the international stock exchange.

In Mars 2010, another report appeared, but it focused more on tackling the financial risks of credit institutions; this report was developed by a group belonging to the Ministry of Economic and General Affairs, Bank Al Maghrib (Central Bank) and a group of professionals from other banks in Morocco.

The privatization and the concern to control the activities of the state contributed to the elaboration of the Moroccan code of governance best practices for public institutions and companies by the Ministry of Economy and Finance on February 2011. This code recommended the creation of audit committees within the public companies in order to control costs and financial risks and provide them with governance bodies that will enable them to have an access to different financial options proposed by financial international arenas.

The fundamental role of audit committees

The main aim of the creation of audit committees was principally to reduce the agency costs and information asymmetry between managers and shareholders. This role has placed audit committees at the top of the organization by being directly linked to either the administration board or the supervisory board.

Klein (2002), Bryan et al. (2004) demonstrated that the roles of audit committees can be summarized as the following:

- The appointment of external auditors.
- The evaluation of financial statements through holding regular meetings with managers and external auditors.
- The supervision of audit processes and internal control.

In the same sense, the '*Blue Ribbon Committee*' report summarized the role of audit committees in reinforcing the confidence of investors through strengthening the independence of external auditors and the supervision of the work conducted by the internal auditors.

Knapp (1987) states that the ultimate goal of audit committees is to defend the interest of investors via the reduction of agency costs of companies characterized by strong asymmetric information.

In 1995, France published its first report (Vienot 1) in relation to audit committees where the group of work described that the essential tasks of verification committees are 'to ensure the relevance and permanence of the accounting methods adopted to establish the companies' consolidated

social and financial accounts and to verify that the internal procedures of collecting and controlling the information that guarantee that ‘.

In 2003, Spira demonstrated that the audit committee is the body attached to the administration board where the principal missions are depicted in protecting the investors’ interests and guaranteeing the reliability of the information published.

The role assigned to the audit committees in Morocco as mentioned in the reports published between 2008 and 2011, is similar to the roles enunciated by the *Blue Ribbon Committee* reports (1990), Vienot 1 (1995) and Vienot 2 (1999) that focus on reinforcing the investors’ confidence, controlling the financial risks and improving the quality of the published financial information.

Literature review and research hypothesis :

The multiplicity of manipulations in the accounting and financial fields imposes an in depth study of the composition of companies’ results. These manipulations are the outcome of the number of factors instituted by the internal governance of companies.

Theoretically, a small number of studies have focused directly or indirectly on the interactions between the presence of audit committees in the companies and earnings management.

However, the problematic outbreak of this interaction is recent. Peasnell et al. (2005) demonstrate that from 1993 to 1996, the presence of the audit committee and the independence of the administration board within the companies listed in the United Kingdom, where managers had more interest in manipulating the accounting results, allowed in reducing indirectly the strong manipulations in earnings mainly because the earnings before manipulations were low.

These authors conclude that allowing the administrators (belonging to the audit committee) to control the opportunistic accounting manipulations, this will affect indirectly the company’s governance.

Badolato et al. (2014), note the effects of the presence of audit committees on earnings management. They have showed that the status of the audit committee as well as its expertise reduce earnings management through the reduction of abnormal regulations.

Davidson, Goodwin-Stewart and Kent (2005) studied the relation between earnings management and the presence of audit committees for 434 companies listed in 2000 in the Australian Securities Exchange (ASE). They have found that the presence of audit committees limits the opportunism of executives via the manipulation of accounting figures, which allows in publishing a low growth accounting result.

Another study by Piot and Janin (2007) focused on studying the direct interactions between the presence of audit committees and earnings management. The authors studied the companies included in the index SBF 120 between 1999 and 2001; the study demonstrated that the presence of the audit committee leads to a decrease in abnormal regulations. In other words, the presence of these committees allows in decreasing the abnormal accruals or more correctly the reduction of earnings management.

Baxter and Cotter (2009) studied the impact of the presence of audit committees on earnings management in the American context where they focused mainly on studying the characteristics of these committees. They found that the financial expertise of the members of the audit committee reduces earnings management significantly.

Ghosh et al. (2010) analyzed the financial statements and characteristics of the companies mentioned in the S&P 1500 index before and after the Sarbanes-Oxley (SOX) law; they found that there is a positive relationship between the presence of audit committees and earnings management. This presence is materialized according to these authors by the characteristics of the audit committees, namely, the independence, the number of meetings and the expertise of its members.

In addition to this, other studies have demonstrated that the presence of audit committees does not have a direct interaction with earnings management. This is shown in a study conducted by Peasnell et al. (2005) who have revealed that for the companies listed in the United Kingdom, the existence of audit committees does not allow in reducing earnings management with the goal of reducing or increasing the gains that would be distributed by the company. Ittonen et al. (2016) show that by relying on the financial statements from 2004 to 2012 of American banks with S&P 500, S&P MidCap 400 et S&P SmallCap 600 indexes, the audit committee does not reduce the earnings management when it is composed of former external auditors. Wan Mohammad et al (2016) find that in the Malaysian context, the independence of the board of directors mainly via its audit committee and administrators, does not lead to reducing the earnings management.

Following this literature review, this paper will try to test the following hypothesis in the Moroccan context:

“the presence of an audit committee reduces earnings management”

Methodology and research model

Study sample

The companies that will be studied are those listed on the Casablanca Stock Exchange and are part of sectors containing at least 6 companies. This will help in answering to the requirements of the modified model (Dechow, Sloan & Sweeny 1995) of Jones (1991) of the calculations of earnings

management with the exception of the banking and insurance sector that requires a more particular financial knowledge.

Besides, given that the Casablanca Stock Exchange only has 75 listed companies where 18 belong to the banking and insurance sector and considering the limited number of companies in each activity sector, the number of companies that respond to the conventional criteria is set at 28 companies. Among these companies, one is not part of our field of study because of the lack of data in the period set between 2011 and 2014.

The distribution of the companies by sector is summarized in the table 1:

Table 1: distribution of the companies by sector

Activity sector	Number of companies	Number of excluded companies
Food/Production	6	0
Building and construction materials	8	0
Distributors	7	1
Hardware, software and IT	7	0
Total	28	1

The used data is gathered from activity reports, presentation notes, information/briefing notes, IPO notes, administrative board resolutions and the financial statements available on the Casablanca Stock Exchange website, the websites of the studied companies and that of the Moroccan Capital Market Authority (AMMC).

Dependent variable

In order to calculate the earnings management, we will proceed by calculating the total accruals (TA) to extract the discretionary part of the result (leaders' manipulation). These accruals correspond to the difference between the net income (RN) and the operating cash flow (CFO).

$$TA = RN - CFO$$

For each company *i* and year *t*, we calculate the total accruals (TA) by the following formula:

$$TA_{it} = \Delta BFR_{it} - DAP_{it}$$

With:

i = 1 à 27 and *t* = 2011, 2012, 2013 and 2014

ΔBFR = Change in need of working capital calculated on a gross basis and load capacities to distribute

DAP = Amortization, provisions and impairment

To be able to determine the non-discretionary part of the result, we will calculate the non-discretionary accruals by relying on the modified model of (Dechow, Sloan & Sweeny 1995) and Jones (1991) using the 5 figures ISIN code and a minimum of 6 companies.

For this purpose, we will use the following formula for each activity sector j and year t :

$$NDA_{jt} = \alpha_{jt} + \beta \cdot IMMO_{jt} + \gamma_1 \Delta(CA - CLIENTS)_{jt} + \varepsilon_{jt}$$

With:

NDA = Non-discretionary accruals by company

IMMO = gross intangible assets + deferred charges

CA = sales' figures

CLIENTS = gross accounts receivable

In addition, the abnormal discretionary part of the result (discretionary accruals, DAC) is obtained via the difference between the accruals' total (TA) and the non-discretionary accruals as calculated by the Jones' modified model.

We as a result obtain our dependent variable via the following formula:

$$DAC_{it} = TA_{it} - [\alpha_{it} + \beta \cdot IMMO_{it} + \gamma_1 \Delta(CA - CLIENTS)_{it} + \varepsilon_{it}]$$

Independent variables

PCA (*Presence of an Audit Committee*): binary variable coded 1 if the company has an audit committee and 0 if it does not.

NDA: The non-discretionary accruals by company.

SIT: Dummy, 1 if the company is introduced in the stock exchange where it has proceeded to an increase in capital or a mandatory emission and 0 if it does not.

END: Indebtedness corresponds to debts and equity.

ACDIRIG: Is the percentage held by the leaders in the company's capital.

SECT: Dummy representing the activity sector gathered in our empirical study.

Control variables

TAILLE: The firm Size: Natural algorithm of total assets

TAILLECA: The size of the administration board is equal to the natural algorithm of administration board's number of members.

ROA: Company's economic profitability corresponds to EBIT / Total assets

INDEPCONSEIL: Proportion of independent members on the board: percentage (%) of independent administrators/directors on the administration board or supervisory board.

Study model

In order to study our hypothesis, we used the following model:

$$\text{DAC}_{it} = \beta_1 \text{PCA}_{it} + \beta_2 \text{END}_{it} + \beta_3 \text{SIT}_{it} + \beta_5 \text{NDA}_{it} + \beta_6 \text{TAILLECA}_{it} + \beta_7 \text{SECT}_{it} + \beta_8 \text{INDEPCONSEIL}_{it} + \beta_9 \text{TAILLE}_{it} + \beta_{11} \text{ROA}_{it} + \beta_{12} \text{ACDIRIG}_{it} + \varepsilon_{it}$$

With i representing the order of the company listed in the stock exchange and t representing the year

ε : Specification error

Empirical results and discussions

Exploring the variables explained by the tools of descriptive statistics allows in developing the following Table 2:

Table 2: descriptive statistics of variable DAC. (** present respectively the bilateral critical probability less than 1%)

Measures of accruals	N	Minimum	Maximum	Average	Standard Deviation	Median	Nullity (t-stat)
DAC	108	-3,07	0,43	-0,07	0,35	-0,03	-2,212 **

Exploring the variable throughout the period, discretionary accruals for each company listed on the Casablanca stock exchange allows in lifting a net loss on average and median. This tendency is to be examined by adopting an annual cross section.

Table 3 summarizes the principal characteristics of central tendency and annual dispersion of the variable DAC.

Table 3: descriptive statistics by year of the variable DAC

Years	N	Minimum	Maximum	Median	Average	Standard Deviation	coefficient of variation
2011	27	-0,82	0,20	-0,06	-0,08	0,19	-2,36
2012	27	-0,43	0,43	-0,06	-0,07	0,20	-2,93
2013	27	-0,47	0,30	-0,02	-0,03	0,16	-5,90
2014	27	-3,07	0,43	0,01	-0,12	0,63	-5,20

In this evolution, the year 2013 presents the best results in terms of average, but with a relative dispersion of 0,16. By making use of the calculations of coefficient of variation, we see that this year corresponds to the greatest relative variability (5.90 in absolute value). This annual fluctuation encourages us to explore the variability of annual DAC through the model we presented earlier. This model is related to the hypothesis that we are trying to prove/confirm and that states that the presence of the audit committee reduces earnings management. Relying on the annual study was driven by exploring the explanation of the variable studied 'DAC'.

To achieve this, we proceed by multiple regressions as it is depicted in the Stepwise regression. The results of these regressions are presented as the following:

Table 4: exploring the annual variable DAC: the multiple regressions' results (Stepwise method) (*, ** present respectively the bilateral critical probability less than 5% and 1%).

Year	explanatory variable	Coefficient β	t-stat
2011	ROA	-0,953	-2,338 *
2012	INDEPCONSEIL	-0,432	-2,822* *
2013	INDEPCONSEIL	-0,268	-2,107 *
2014	PCA	-0,437	-2,212 *

By analyzing this table, it appears that there is a significant awareness by the Moroccan companies listed on the Stock exchange regarding the need for transparency. A consciousness that is expressed in terms of interest to display the signs of transparency and lack of accounting manipulations. This tendency came true on 2014 through the confirmation of the hypothesis of our analysis. This tendency also should be put into perspective with the Moroccan companies. In fact, as a characteristic that is existent in all Moroccan companies even the ones listed in the stock exchange, the family aspect remains a synonym for opacity, discretion and accounting manipulations. This opacity according to Howorth and Weshtead (2003) is due to the lack of integration of financial techniques as they should be in the family-run businesses, which is an outcome of the unwillingness of family leaders.

Equally, and in the Tunisian context that is similar to that of morocco, Elleuch Hamza (2012) shows that all family run companies rely on earnings management mainly to maintain the stock price. In addition to this, our analysis demonstrates that earnings management was improved through the financial profitability. As a consequence, and starting from the year 2013, this latter led to the creation of good governance mechanisms, such as the independence of the administration board, which means that the independent administrators are appointed within the board, regardless of the family nature of the Moroccan companies.

The result of this independence is the creation of audit committees, which explains the presence of our PCA variable in 2014 as an explanatory variable of earnings management. This variable should be analyzed as a tendency of Moroccan companies to appropriate transparency tools mainly through an audit committee.

This pushes us to ask a question regarding 'tangible' explanation of dictionary results with the retained variables. The fact that year after year there exists an overlap in the persistence in the explanation of DAC variable is likely linked to a clear tendency to observe the respect of a certain order or

an ethic in an accounting environment. In fact, the tendency towards good governance is confirmed by the absence of accounting manipulations in the companies that generally have a family nature. Focusing on this characteristic leads finding plausible risks of manipulations in accounting statements in a less transparent environment as the case in family run companies especially when it comes to accounting secrets as mentioned by Vuillermot-Febvet (2015) for France's Paribas.

This must be, however, relativized with the peremptory norm established since 2016 following the amendment of the law on limited companies, demanding to follow a set of rules of good governance for companies making public offerings, such as the audit Committee in order to protect the interests of small investors and ensure greater transparency in the management of listed companies. Is there then a clear trend of companies studied to prepare for such a condition of transparency as required by good governance practices? The question remains open since the study period does not apply to the year 2016 due to the lack of data for analysis.

Beyond what is advanced and in principle, it is worth noting that the presence of the audit committee is identified as one of the mechanisms guaranteeing reliability of financial information and therefore those related to earnings management. It should be noted in this regard that during the studied period, the number of publicly listed companies that claim to have an audit committee are nine in 27, one-third of our sample. The relevance related to the hypothesis of the impact of the presence of the audit committee on earnings management as assessed through the discretionary accruals by company seems to gradually build through a tendency to adopt more transparent rules.

Another note is to raise, concerns the signs of the variables selected after annual regressions: the β coefficients all have a negative sign. The variables actually act in the direction of reducing earnings management. This is confirmed by many researchers (Piot and Janin 2004, 2007; Zarai and Bettabai 2007; Bouaziz and Triki 2012). Similarly, this earnings management reduction grants in part with the formulation of the hypothesis to be tested. The hypothesis was verified for the year 2014, which leads us to infer that there is a modest trend towards the establishment of audit committees in the Moroccan companies listed in the Casablanca stock exchange.

Conclusion

In this study, we have tried to examine the impact of the presence of audit committees on earnings management and test it empirically in the Moroccan companies listed in the Casablanca stock exchange. This model allowed us to deduct that the impact of audit committees started appearing in

2014. This situation is the result of the improvement of the financial return of the companies studied, which allowed for a gradual adoption of governance mechanisms mainly through the integration of independent administrators in the administration boards as we found in the years 2012 and 2013 and through the implementation of audit committees in 2014.

In addition, in the growing openness context marked by the occurrence of multiple risks, imposing new challenges and offering many opportunities, complying with a number of international standards with regards to good governance and accounting and financial transparency, seems to set the path for the Moroccan companies. However, this tendency is still considered limited for it is anchored on companies that are family based. This tendency can be also interpreted as a preparation for these companies to be able to adopt the new law on anonymous companies dictating the creation of audit committees, which will help in the fight against opacity and accounting manipulations.

Following the example of previous studies, we were able to confirm that audit committees reduce earnings management, but this confirmation does not appear to be satisfying because it concerns only the year 2014 and there was a lack of data in the year 2016 to measure the impact of these committees on earnings management for the companies that do not follow the new regulations.

Finally, this study allows managers and various stakeholders to understand the importance of setting up governance mechanisms mainly the audit committee in the earnings management and its role in protecting the interests of shareholders. However, the results of these studies push us to ask an important question: does the effectiveness of the audit committee influence the earnings management?

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